



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/725,728 | 11/29/2000 | William P. Acker | MTIP001US | 9617 |

27949 7590 01/08/2003

LAW OFFICE OF JAY R. YABLON
910 NORTHUMBERLAND DRIVE
SCHENECTADY, NY 12309-2814

EXAMINER

CREPEAU, JONATHAN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1745

6

DATE MAILED: 01/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/725,728

Applicant(s)

ACKER ET AL.

Examiner

Jonathan S. Crepeau

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-19, 21-39, 41 and 42 is/are allowed.
- 6) ☒ Claim(s) 20 and 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 6.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office action addresses claims 1-40 and newly added claims 41 and 42. Claims 1-19, 21-39, 41, and 42 are allowed. However, claims 20 and 40 are newly rejected under 35 USC §103, as necessitated by amendment. Accordingly, this action is made final.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edlund et al (U.S. Patent 6,383,670) in view of Tsutsumi et al (U.S. Patent 5,366,820).

In Figure 3 and in column 5, lines 42-46, Edlund et al. teach a fuel cell system comprising a controller (28) for receiving an input of a fluid level measurement of fuel tanks (78, 80). The controller subsequently directs refill fluid to be automatically added to the tanks. In column 3, lines 21-34, the reference teaches that the communication pathway may be a telecommunications link (e.g., radio frequency, wireless signals). The reference further teaches that the fluid may be added from an "external" source.

However, Edlund et al. do not expressly teach that the refill fluid is ordered from a “remote” source.

The patent of Tsutsumi et al. is directed to a fuel cell system. In Figure 1 and in column 8, lines 12-25, the reference teaches a configuration in which fuel (i.e., hydrogen) is supplied from a main tank (2) to a sub tank (5). The main tank (2) is replaced as needed during operation of the fuel cell.

Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the disclosure of Tsutsumi et al. would motivate the artisan to use a dual-tank feeding structure in the system of Edlund et al., thereby providing for the replacement of one of the tanks from a “remote” source. In column 8, line 21, Tsutsumi et al. teach that “the fuel cell system according to this invention can supply the hydrogen gas from the sub tank 5 to the fuel cell 1 while the main tank 2 is replaced. There is no hurry in replacing the main tank 2.” Therefore, with this configuration, there would be minimal interruption in fuel flow during the replacement of a fuel tank. Additionally, as noted above, Edlund et al. teach that replacement fuel may be added from an “external” source. The teachings in both of these references would motivate one of ordinary skill in the art to use^e the dual tank configuration of Tsutsumi et al. in the system of Edlund et al., thereby resulting in refill tanks in the system of Edlund et al. that are obtained from a “remote” source. Note that the term “remote source” is interpreted herein as meaning a source which was not originally directly connected to the fuel cell.

Allowable Subject Matter

4. Claims 1-19, 21-39, 41, and 42 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter:

The reasons for allowance of independent claims 1, 13, 21, and 33 were given in the previous Office action and remain applicable.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (703) 305-0051. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached at (703) 308-4333. The phone number for the organization where this application or proceeding is assigned is (703) 305-5900. Additionally, documents may be faxed to (703) 305-5408 or (703) 305-5433.

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Patrick Ryan
Supervisory Patent Examiner
Technology Center 1700

JSC

January 2, 2003